

Fall Herbicide Applications Can Help Control Black Cutworms

Black cutworm (*Agrotis ipsilon*) infestations tend to be associated with tillage practices and weed management¹. Reduced- and no-till systems with significant winter annual weed cover, during peak black cutworm (BCW) egg laying, have the highest potential for a BCW infestation. This is because BCW prefer to lay eggs on winter annuals, such as chickweed (Figure 1). A fall herbicide application or tillage can potentially reduce BCW infestations by helping to provide weed free fields in the spring.

Black Cutworm

Each spring BCW moths migrate from the south and lay their eggs on growing weeds. When the weeds are killed in the spring by a burndown herbicide application, BCW larvae begin feeding on emerging corn. Applying a fall herbicide can help minimize the number and impact of BCW in a field the following spring by reducing weed populations. BCW cause damage that can lower yield potential by:

- Reducing plant stands.
- Cutting off the corn plant above or below the growing point.
- Burrowing into the stems of larger plants.

Benefits of Fall Herbicide Application

Fall herbicide applications are becoming a more common practice, especially in reduced- and no-tillage fields. Fall herbicide applications help control winter annuals that are preferred by BCW for egg laying in the spring. There are other potential benefits from applying fall herbicides:

- Controlling winter annual weeds.
- Reducing vegetation, where insects overwinter or lay eggs.
- Reducing interference with planting and tillage operations.
- Preventing weeds from producing seeds.
- Preventing unnecessary soil moisture losses.
- Creating a weed-free seedbed in the spring.
- Increasing soil warming.



Figure 1. Black cutworms prefer to lay eggs on winter annuals such as common chickweed.

When to Apply Fall Herbicides

The air temperature plays a major role in determining the success of fall herbicide applications. Applications in the fall should be made when temperatures are above 50°F. The weeds need to be actively growing for the herbicide to work. If there has been a killing frost, it is too late to apply a fall herbicide. However, if there have been several light frosts and the weeds have only minor injuries with healthy green leaf tissue, a fall herbicide application may be effective.

Fall Herbicide Options

This fall applying a Roundup® agricultural herbicide tank mixed with 2,4-D can be an effective way to

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manage winter annual weeds. A residual herbicide could also be added to the tank mix to provide longer-season control of winter annuals and early germinating summer annuals. A fall application of 2,4-D may provide some short term residual activity. Table 1. lists specific Roundup® brand agricultural herbicides and tank mixes as well as herbicides with longer lasting residual activity. Always refer to herbicide labels before application.

In-Season BCW Management

Growers who plant Genuity® Smartstax® corn products have a mode of action which can provide control of BCW. Traits from these corn products are complimented with Acceleron® seed treatment products, which include clothianidin insecticide to provide additional suppression for BCW. Use of these technologies have the potential to reduce the risk of stand loss from BCW.

Preventative insecticides may be another management option, although some University experts question their worth due to the sporadic nature of BCW infestations². Several insecticide rescue treatments are available for use if thresholds are met.

If you have questions about fall herbicide applications or BCW management, please contact your local area agronomist.

Sources: ¹R.B. Hammond et al. 2009. Black cutworm on corn. Ohio State University Extension Fact Sheet. Publication no. FC-ENT-0035-09; ²A. Sisson, et al. May 5, 2011. Black cutworm scouting advisory 2011. Iowa State University Extension. Integrated Crop Management News ; Additional sources used to created this publication: R.J.

Table 1. Fall Burndown Herbicide Options For Winter Annuals and Dandelions.

ANY CROP NEXT SPRING (NO RESIDUAL)

Roundup PowerMAX® + 2,4-D Ester
Roundup PowerMAX® + Clarity®

SOYBEANS NEXT SPRING*

Authority® XL / Authority® First
Canopy® EX
Gangster® / Valor® XLT

CORN NEXT SPRING*

Basis®
Simazine
TripleFLEX® Herbicide

**These products with residual activity can be applied in combination with various post-emergence herbicide products. Refer to the individual product labels for tank mixture and use recommendations.*

Whitworth and H. Davis. February 2011. Black cutworms. Kansas State University Extension. Kansas Crop Pests. Publication no. MF-2954; R. Hammond and A. Michel. 2011. Fall weed control in corn and black cutworm. Ohio State University Extension. C.O.R.N. Newsletter. Publication no. 2011-35; M. Owen. September 27, 2007. Fall herbicide applications—is this a good practice. Iowa State University; M. Renz. October 10, 2006. Late fall herbicide application on herbaceous perennial weeds. University of Wisconsin Crop Management News.

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